

$$I(u,v)=R(u,v) \sum_i (\max((\ell_i \vec{L}_i \cdot \vec{N}(u,v)), 0)) \text{ ----- (1)}$$

$$I(u,v)=R(u,v) \vec{N}(u,v) \cdot \vec{L} \quad (\vec{L} = \sum_i \ell_i \vec{L}_i) \text{ ----- (2)}$$

$$S = [\vec{K}_1 \quad \vec{K}_2 \quad \dots \quad \vec{K}_N]$$

$$V = \frac{1}{N} S S^T \text{ ----- (3)}$$

$$\frac{\sum_{i=1}^M \sigma_i}{\sum_{i=1}^N \sigma_i} \times 100 [\%] \text{ ----- (4)}$$

$$\frac{\sum_{i=1}^M \sigma_i}{\sum_{i=1}^N \sigma_i} \geq 0.95 \text{ ----- (5)}$$

$$\vec{I}_c = \sum_{i=1}^M (\vec{I}_q \cdot \vec{B}_i) \vec{B}_i \text{ ----- (6)}$$

$$D = |\vec{I}_q - \vec{I}_c|^2 \text{ ----- (7)}$$

$$\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}, \frac{z_1+z_2}{2} \right) \text{-----} (8)$$

$$\begin{bmatrix} u_i \\ v_i \end{bmatrix} = \frac{f}{c} \begin{bmatrix} a \\ b \end{bmatrix} \text{-----} (9)$$

$$\begin{bmatrix} a \\ b \\ c \end{bmatrix} = R \begin{bmatrix} x_i \\ y_i \\ z_i \end{bmatrix} + \begin{bmatrix} T_x \\ T_y \\ T_z \end{bmatrix} \text{-----} (10)$$

$$R = \begin{bmatrix} \cos R_y \cos R_z - \cos R_x \sin R_z + \sin R_x \sin R_y \cos R_z & \sin R_z \sin R_x + \cos R_x \sin R_y \cos R_z \\ \cos R_y \sin R_z & \cos R_x \cos R_z + \sin R_x \sin R_y \sin R_z & -\sin R_x \cos R_z + \cos R_x \sin R_y \sin R_z \\ -\sin R_y & \sin R_x \cos R_y & \cos R_x \cos R_y \end{bmatrix} \text{-----} (11)$$